REMARKS/ARGUMENTS

The Office Action of October 6, 2005, has been carefully reviewed and this response addresses the concerns stated in the Office Action and puts the remaining claims in condition for allowance.

I. PETITION FOR ONE-MONTH EXTENSION OF TIME

A Petition for a one-month extension and an extension fee of $120 for a large entity is attached hereto. The Office Action was mailed on October 6, 2005, thus making this response timely filed, with the one-month extension of time, on or before February 6, 2006.

II. STATUS OF THE CLAIMS

Claims 1-19, 21-25, 28, and 30-31 are currently pending in the application.

Claim 20 has previously been cancelled.

Claims 26, 27, and 29 have been previously withdrawn from consideration.

Claims 30 and 31 have been added. Support for the new claims can be found in FIG. 9 (claim 30) and in paragraph 50 (claim 31). No new matter has been added.

Claim 23 is objected to because the Office Action states that it is unclear if the bar code is being claimed in combination with method using the purchasing aid logistics appliance.

Claims 22 and 23 are rejected under 35 U.S.C. §102(b) as being anticipated by Petrovich et al., United States Patent Number 6,101,483, issued August 8, 2000 (Petrovich).

Claims 1-5, 8, 9, 11, 13, 15, 16, 18, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petrovich in view of Treyz et al., United States Patent Number 6, 587, 835, filed on February 9, 2000, issued on July 1, 2003 (Treyz). Applicant respectfully points

out that Treyz issued 1_ years after the filing date of Applicant's application, January 4, 2002.
Applicant respectfully reserves the right to swear behind Treyz under 37 C.F.R. § 1.131.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Petrovich in view of
Treyz as applied to claim 4, and in further view of Ruppert et al., United States Patent Number
5,424,524, issued on June 13, 1995 (Ruppert).

Claims 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over
Petrovich in view of Treyz as applied to claim 1 and further in view of WO 01/20526, priority
date September 15, 1999, published on March 22, 2001 (WO '526). Applicant respectfully
points out that WO '526 was published within a year of the filing date of Applicant's
application, January 4, 2002. Applicant respectfully reserves the right to swear behind WO '526
under 37 C.F.R. § 1.131.

Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petrovich
in view of Treyz as applied to claim 4, and in further view of Shaw, United States Patent
Number 6,568,596, filed on October 2, 2000, issued on May 27, 2003 (Shaw). Applicant
respectfully points out that Shaw issued almost 1_ years after the filing date of Applicant's
application, January 4, 2002. Applicant respectfully reserves the right to swear behind Shaw
under 37 C.F.R. § 1.131.

Claims 10 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over
Petrovich in view of Treyz as applied to claim 1, and in further view of Kawan, United States
Patent Number 6,102,049, issued on January 4, 2000 (Kawan).

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Petrovich in view
of WO '526 and Ruppert.

Claims 21 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over
Petrovich in view of Kawan.

Claims 7, 18, 22, and 23 have been amended to further define the invention.

III. AMENDMENTS TO THE SPECIFICATION

In the specification, the paragraphs 26, 32-34, 39-41, 44-48, 50-53, 55, 59, and 77 have been amended to correct informal editorial problems and reference number duplications.

IV. AMENDMENTS TO THE DRAWINGS

In amended FIGs. 1, 3, 8, 9, 10, 11, 11A, and 16, reference numbers have been changed and/or added to eliminate duplicates and omissions, and correct typographical errors as follows:

FIGURE	OLD REFERENCE NUMBER	NEW REFERENCE NUMBER
1	30	28
3	102	102A
	104	104A
	106	106A
	108	108A
	112	112A
8	10	10A
	12	12A
	20	20A
	22	22A
9	32	32S
	34	34A
	36	36S
10	40	40S
	42	42A
	44	44A
	46	46A

11	50	50A
	52	52A
	54	54A
	56	56A
	57 referred to in the Spec. but not in the FIG.	57
	58 referred to in the Spec. but not in the FIG.	58A
11A	41	41e
	43	43c
16	320	320A

V. SECURE MEMORY

A. AFFIDAVIT UNDER 37 U.S.C. § 1.132

The Federal Circuit has stated many times that the first step in claim interpretation is to determine the ordinary and customary meaning, if any, that would be attributed to the term by those skilled in the art. (See, for example, *Boehringer Ingelheim Vetmedica v. Schering-Plough*, 320 F.3d 1339 (Fed Cir 2003).

As for the validity of the use of someone of ordinary skill in the art to interpret the words of the claims, see the en banc decision of the Federal Circuit in *Phillips v AWH Corp.*(Fed Cir 2005)(Appeal No.: 03-1269, -1269, decided July 12, 2005. For example, the court in that case said:

> Importantly, the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification. This court explained that point well in Multiform Desiccants, Inc. v. Medzam, Ltd., 133 F.3d 1473, 1477 (Fed. Cir. 1998):
> It is the person of ordinary skill in the field of the invention through whose eyes the claims are construed. Such person is deemed to read the words used in the patent documents with an understanding of their meaning in the field, and to have knowledge of any special meaning and usage in the field. The inventor's words that are used to describe the invention—the inventor's

lexicography—must be understood and interpreted by the court as they would be understood and interpreted by a person in that field of technology. Thus the court starts the decisionmaking process by reviewing the same resources as would that person, viz., the patent specification and the prosecution history.

See also Medrad, Inc. v. MRI Devices Corp., 401 F.3d 1313, 1319 (Fed. Cir. 2005) ("We cannot look at the ordinary meaning of the term . . . in a vacuum. Rather, we must look at the ordinary meaning in the context of the written description and the prosecution history."); V-Formation, Inc. v. Benetton Group SpA, 401 F.3d 1307, 1310 (Fed. Cir. 2005) (intrinsic record "usually provides the technological and temporal context to enable the court to ascertain the meaning of the claim to one of ordinary skill in the art at the time of the invention"); Unitherm Food Sys., Inc. v. Swift-Eckrich, Inc., 375 F.3d 1341, 1351 (Fed. Cir. 2004) (proper definition is the "definition that one of ordinary skill in the art could ascertain from the intrinsic evidence in the record").

(*Phillips* pp 10-11)

Thus, *Phillips* and others teach that the claim terms should be interpreted to what is the ordinary and accustomed meanings of the term to a person of ordinary skill in the art.

Applicants herein submit an affidavit under 37 U.S.C. § 1.132 in which a person of ordinary skill in the art, following a review of Applicants' Specification, Petrovich, and the Office Action, declares:

(1) That the term, "secure memory", as used in Applicants' Specification and claims, is a term of art;

(2) That the Applicants' Specification clearly states that access control does not protect data that are stored in memory against unauthorized access, but an implementation of secure memory such as encrypted RAM would protect the data, but that Petrovich does not recognize such a distinction;

(3) That FIG. 9 of the Applicants' Specification illustrates access control *and* secure memory;

(4) That the Applicants' Specification has set forth ways in which a secure memory resource could be implemented, and Petrovich, on the contrary, has set forth no such features.

(5) That if a user gains access to secure memory, i.e. if access control measures have failed, the user cannot automatically access the data in the secure memory.

(6) That Petrovich describes what is commonly known in the art as access control;

(7) A simple access control mechanism such as the PIN number provision in Petrovich does not protect memory when the access control mechanism is bypassed; and

(8) That the description in Petrovich is limited to access control.

Applicants therefore assert that Petrovich cannot render Applicants' invention unpatentable under 35 U.S.C. § 103(a) because Petrovich does not disclose secure memory.

B. INTRINSIC EVIDENCE

The Office Action states that anything that has restricted access is considered to be secure, that access control, for example, is one type of security, that encryption is another, and that both of these provide a secure memory in that they prevent unauthorized access. The Office Action further states that the "access control" of Petrovich is considered to provide "secure memory" (Office Action of January 27, 2005, paragraph 43).

However, the Federal Circuit has indicated that the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim. The construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be the correct construction. *Renishaw plc v. Marposs Societa' per Azioni*, 48 USPQ2d, 1117, 1122 (Fed Cir 1998).

Page 33 of 52

Further, the court in *Phillips* refers to Judge Rich's statements regarding the use of intrinsic evidence. In particular, *Phillips* points to the use of the specification as the primary basis for construing the claims.

Shortly after the creation of this court, Judge Rich wrote that "[t]he descriptive part of the specification aids in ascertaining the scope and meaning of the claims inasmuch as the words of the claims must be based on the description. *The specification is, thus, the primary basis for construing the claims.*" Standard Oil Co. v. Am. Cyanamid Co., 774 F.2d 448, 452 (Fed. Cir. 1985). On numerous occasions since then, we have reaffirmed that point, stating that *"[t]he best source for understanding a technical term is the specification from which it arose, informed, as needed, by the prosecution history."* [Emphasis added] Multiform Dessicants, 133 F.3d at 1478; Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings, 370 F.3d 1354, 1360 (Fed. Cir. 2004) ("In most cases, the best source for discerning the proper context of claim terms is the patent specification wherein the patent applicant describes the invention."); see also, e.g., Kinik Co. v. Int'l Trade Comm'n, 362 F.3d 1359, 1365 (Fed. Cir. 2004) ("The words of patent claims have the meaning and scope with which they are used in the specification and the prosecution history."); Moba, B.V. v. Diamond Automation, Inc., 325 F.3d 1306, 1315 (Fed. Cir. 2003) ("[T]he best indicator of claim meaning is its usage in context as understood by one of skill in the art at the time of invention.").

That principle has a long pedigree in Supreme Court decisions as well. See Hogg v. Emerson, 47 U.S. (6 How.) 437, 482 (1848) (the specification is a "component part of the patent" and "is as much to be considered with the [letters patent] in construing them, as any paper referred to in a deed or other contract"); Bates v. Coe, 98 U.S. 31, 38 (1878) ("in case of doubt or ambiguity it is proper in all cases to refer back to the descriptive portions of the specification to aid in solving the doubt or in ascertaining the true intent and meaning of the language employed in the claims"); White v. Dunbar, 119 U.S. 47, 51 (1886) (specification is appropriately resorted to "for the purpose of better understanding the meaning of the claim"); Schriber-Schroth Co. v. Cleveland Trust Co., 311 U.S. 211, 217 (1940) ("The claims of a patent are always to be read or interpreted in light of its specifications."); United States v. Adams,

383 U.S. 39, 49 (1966) ("[I]t is fundamental that claims are to be construed in the light of the specifications and both are to be read with a view to ascertaining the invention."). (*Phillips*, pp. 13-15)

The totality of Applicants' Specification provides a person of ordinary skill in the art with a clear definition of secure memory at least because the term is associated with the embodiments, depicted in FIGs. 9, 10, and 11, which are each themselves set forth in Applicants' Specification so that a person of ordinary skill in the art could implement them. Applicants assert that the guidance provided by the Federal Circuit in *Phillips* supports the patentability of Applicants' invention because Petrovich does not disclose or suggest Applicants' claimed secure memory that is both defined in the specification and used as a term of art by one of ordinary skill in the art.

VI. OBJECTION

On page 2, in paragraph 1, the Office Action states that claim 23 is objected to because it is unclear if the bar code is being claimed in combination with method using the purchasing aid logistics appliance. Applicant has amended claim 23 to remove references to the master control code. No new matter has been added.

VII. REJECTIONS UNDER 35 U.S.C. § 102(b)

On pages 2-3 and 15-16, in paragraphs 2-4 and 40-42, with respect to claims 22 and 23, the Office Action states that Petrovich discloses the method of claim 22 in the following cited passages: col. 4, lines 56-58, col. 2, lines 18-34, col. 10, lines 25-29, col. 10, lines 9-12, col. 12, lines 36-39, and col. 12, lines 55-56. Applicants have amended claim 22 to further define the invention. Support for the amendments can be found in paragraphs 33, 57, and 70 of Applicants' Specification.

Applicants assert that since Petrovich does not set forth each and every element of Applicants' amended independent claim 22, either expressly or inherently, Applicants' amended independent claim 22, and claim 23 which depends from claim 22, is not anticipated by Petrovich and a rejection under 35 U.S.C. §102(b) is inappropriate. Therefore, Applicants respectfully request the withdrawal of the rejection under 35 U.S.C. §102(b) with regards to amended independent claim 22, and claim 23 which depends from claim 22, for the reasons set forth above. Furthermore, a 35 U.S.C. § 103 rejection of these claims would be inappropriate as well. Applicants' claimed invention is not an obvious extension of the use of Petrovich to meet Applicants' patentable limitations.

VIII. REJECTIONS UNDER 35 U.S.C. § 103(a)

On pages 3-10, paragraphs 6-24 of the Office Action, claims 1-5, 8, 9, 11, 13, 15, 16, 18, 24, and 25 are rejected under 35 U.S.C. §103(a) as being unpatentable over Petrovich in view of Treyz et al., United States Pat. No. 6,587,835 (Treyz), issued July 1, 2003.

Applicants respectfully point out that, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references. Second, there must be a reasonable expectation of success. Finally, the prior art references must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Applicants' disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Further, obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. Applicants

assert that independent claims 1, 18, 19, 21, 22, 28, and 30 are not made obvious by the references at least because:

(1) Applicants claim secure memory, while Petrovich states a process for access control;

(2) Petrovich does not disclose a portable terminal is capable of non-interfering and secure communications between the portable terminal and the merchant's computer through the plurality of antennas; and

(3) Petrovich does not disclose a purchasing aid logistics appliance having a central processor that transmits a first signal to the means for outputting of the purchasing aid logistics appliance, whereby the means for outputting transmits the first signal to a merchant computer.

Applicants further respectfully point out that the cited reference, Treyz, was issued on July 1, 2003, over a year after the filing date of the present application, January 4, 2002. Applicants respectfully reserve the right to file a petition under 37 C.F.R. § 1.131 to swear behind Treyz.

With respect to independent claim 1, on pages 3-4 and 17, in paragraphs 7-8 and 45-47:

(1) The Office Action states that Petrovich discloses a secure memory coupled to said central processor to safeguard personal and financial information (col. 5, lines 19-22 and 55-61). The Office Action also states that anything Applicants' "secure memory" appears to be referring to encryption, but that encryption is not claimed in this independent claim, and therefore Petrovich's access control meets the limitation of Applicants' secure memory.

In the first cited passage (Petrovich, col. 5, lines 19-22), Petrovich states an initialization procedure to set a wireless frequency and to enter a code for security and identification purposes. In the second cited passage (Petrovich, col. 5, lines 55-61), Petrovich states that a PIN can be used to guard against theft of the portable terminal, that the portable terminal can be used in

conjunction with a credit or debit card and can have the same PIN, and that an interface with a magnetic strip reader to be provided to enter credit card information into the portable terminal or directly into the host computer.

As Applicants have explained, in section V of this response, that providing a PIN can provide for access control, but does not provide Applicants' claimed secure memory.

(2) The Office Action states that Petrovich fails to disclose the central processor to include application software to maintain a budget, to perform finance computations, and to track financial accounts.

(3) The Office Action states that Treyz teaches a handheld computing device that includes software to maintain a budget ("limit", col. 46, lines 42-61, FIG. 75) and to track financial accounts, when a user uses the device to pay for a purchase (col. 17, lines 60-65). The Office Action also states that the claim requires only that financial accounts are tracked, and that Treyz's ability to access and manipulate a financial account meet the limitation of "tracking" a finanacial account.

In the first cited passage (col. 17, lines 60-65), Treyz states that a handheld device that may be used for financial transactions such as to pay for a product in a store through conveying information on the user's credit card, for example, to cash register in a store. In the second cited passage (col. 46, lines 42-61), Treyz states that a handheld computing device can establish spending limits for financial transactions.

Applicants maintain that neither paying for purchases nor establishing spending limits is equivalent to Applicants' claimed tracking financial accounts. Nowhere do either Petrovich or Treyz disclose tracking financial accounts.

(4) The Office Action states that it would have been obvious to one having ordinary skill in the art at the time of the invention to modify Petrovich as taught by Treyz, such that the

Petrovich implements software to maintain a budget, perform finance computation, and track financial accounts, so that a user can monitor and restrict spending, and make payments without any additional payment devices. The Office Action further states that Treyz discusses security for such payments in col. 18, lines 41-58.

In the cited passage (Treyz, col. 18, lines 41-58), Treyz states that transactions can be placed under password control, that the user's identity may be verified, and that a smart card can be used to allow or prohibit wireless transaction.

Applicants assert that the prior art references do not teach or suggest all the claim limitations. Neither of the references teaches or suggests secure memory. Therefore, since Petrovich and Treyz, separately or in combination, do not teach or suggest each and every element of Applicants' amended independent claim 1, either expressly or inherently, Applicants' amended independent claim 1, as well as dependent claims 2-17, 25, and 31 that depend directly or indirectly therefrom and that further define the invention, are not made obvious by Petrovich and Treyz, and a rejection under 35 U.S.C. § 103(a) is inappropriate. Applicants assert that independent amended claim 1, as well as dependent 2-17, 25, and 31that depend directly or indirectly therefrom, are now in condition for allowance. Applicants respectfully request the withdrawal of rejections under 35 U.S.C. § 103(a) with regards to dependent claims 2-17, 25, and 31 for the reasons set forth above.

Further remarks with regard to the patentable distinctions of Applicants' claimed invention over Petrovich in view of Treyz are provided below.

With respect to dependent claim 2, on pages 4-5, in paragraphs 9-10,

(1) The Office Action states that Petrovich discloses a plurality of antennas (52, 54) that enable non-interfering and secure communications between the appliance (40) and the merchant's computer, that Petrovich's appliance (40) can receive signals based on the location of the

appliance with respect to the antennas and that the merchant computer transmits product information to the appliance (col. 6, line 54 to col. 7, line 7).

In the cited passage (col. 6, line 54 to col. 7, line 7), Petrovich states that the portable terminal can include a speaker and a position-sensing module to sense the position of the user within the shopping establishment, that the customer can be alerted to specials, that communication with the user can be through the speaker, and that there can be a GPS interface or there can be receivers located throughout the shopping establishment to sense the presence of the user carrying the portable terminal. The Office Action further states that there will inherently be at least some degree of non-interference and security with Petrovich's, that at least some degree of innovation or equipment would be required to access the information displays a minimal layer of security, that in Treyz the user scanning or using RFID is a signal, and that the user receives product information on the appliance as required by the claim.

In other words, Petrovich's portable terminal has a position-sensing module and can have a GPS or similar system, and receivers can be located throughout the shopping establishment, but nowhere does Petrovich state that his portable terminal includes Applicants' claimed plurality of antennas, and nowhere does Petrovich state that his portable terminal is capable of non-interfering and secure communications between the portable terminal and the merchant's computer through the plurality of antennas. For these reasons, Petrovich cannot make obvious Applicants' claim 2.

(2) The Office Action states that Petrovich does not explicitly disclose these means for inputting information to be accomplished with a radio receiver.

(3) The Office Action states that Treyz teaches a handheld shopping appliance (12) that includes a plurality of antennas (col. 15, lines 25-35) capable of enabling non-interfering and secure communications between the appliance and a merchant computer for a plurality of simultaneous signals.

In the cited passage (Treyz, col. 15, lines 25-35), Treyz states that wireless communications circuitry may include one or more antennas, transmitters, tunable, transmitters, receiver, and tunable receivers, and that wireless communications circuitry may support local and remote wireless communications. Treyz does not disclose or suggest, however, Applicants' claimed plurality of simultaneous signals. Simply stating one or more antennas does not necessarily imply simultaneous incoming signals. For this reason, Petrovich and Treyz, either alone or in combination, cannot make obvious Applicants' claim 2.

With respect to dependent claim 3, on pages 5-6 and 17-18, in paragraphs 11 and 49,

(1) The Office Action states that fails to disclose the means for inputting to be an internet port.

(2) The Office Action states that product information is downloaded from the web site in response to a signal from the personal computer, that the computer (28) can communicate with the handheld device (12, column lines 30-32), that an internet port is inherent in this arrangement since there is communication over the internet, that inputting information via an internet port allows the user to input information into the portable device while at home, and does not require the user to have any extra bar codes or codes present in order to enter an item to a list. The Office Action also states that the correct citation above is col. 11, line 12 – col. 12, line 55, where numerous embodiments of communications between several devices of networks are discussed.

In the cited passage (Treyz, col. 11, line 12 – col. 12, line 55), Treyz states, among other things, that an in-home electronic device can be used to create shopping lists, that the shopping list can be provided to the user when shopping, that the shopping list can be downloaded in the store using a physical connection or wirelessly, that shopping lists can be created using a handheld device that is in communication with a network, that a personal computer or automobile computer can be used to create shopping lists, that various devices can support remote interactions with stores and service providers, and that service providers can provide content to

the various devices. Applicants, on the contrary, claim a merchant web site that downloads information to the handheld computer in response to a signal by the personal computer. Treyz states direct interfaces between the merchant and the various devices (handheld computer, personal computer, automobile computer), but Treyz nowhere states that the merchant responds to a signal by one device by sending product information to another device, which is essentially what Applicants have claimed. For this reason, Treyz cannot make obvious Applicants' claim 3.

With respect to dependent claim 11, on page 7 of the Office Action, in paragraph 16, the Office Action states that Petrovich discloses (56 linked to 16) that the central processor transmits a first signal to said means for outputting, whereby said means for outputting transmits said first signal to a merchant computer. Applicants respectfully point out that Petrovich discloses a point of sale checkout terminal 56 coupled to host computer 16. Petrovich does not disclose a purchasing aid logistics appliance having a central processor that transmits a first signal to the means for outputting of the purchasing aid logistics appliance, whereby the means for outputting transmits the first signal to a merchant computer, and thus Petrovich cannot make obvious Applicants' claim 11.

With respect to independent claim 18, on pages 8 and 18, in paragraphs 19-20 and 51,

(1) The Office Action states that Petrovich discloses (24 linked to 16) transmitting said shopping list to a merchant computer upon entry into a merchant facility. Applicants respectfully point out that Petrovich discloses a kiosk connected to a host computer, but does not disclose a method including the step of transmitting a shopping list to a merchant computer upon entry into a merchant facility. Applicants have amended claim 18 to further define the invention. Support for the amendments can be found in paragraphs 33, 57, and 70 of Applicants' Specification. Applicants assert that amended claim 18, in particular Applicants' claimed step of "uploading the shopping list to a merchant computer from the purchasing aid logistics appliance through the first wireless channel while traversing a doorway into a merchant facility, the first

wireless channel directly connecting the merchant computer with the purchasing aid logistics appliance", is patentable over Petrovich, either alone or in combination. For this reason, Petrovich cannot make obvious Applicants' claim 18.

(2) The Office Action states that Petrovich discloses receiving product data from said merchant computer upon entry into said merchant facility (col. 7, lines 18-27). In the cited passage (Petrovich, col. 7, lines 18-27), Petrovich states that a kiosk cradle 24 that includes a portable terminal-receiving station and optical interface, that the kiosk cradle may have an attached printer 96 to print out the shopping list and recipes, etc., a display 200, a keyboard 1103, and a smart card reader. Applicants have amended claim 18 to clearly state that the product data are received into the purchasing aid logistics appliance from the merchant computer, not through a kiosk, as Petrovich states. Thus, Petrovich cannot make obvious Applicants' claim 18.

(3) The Office Action states that Petrovich discloses transmitting said shopping cart file to said merchant computer to checkout (col. 12, lines 49-57). The Office Action also states that the hardcopy of the shopping list described in col. 7, lines 18-27 inherently includes product data as a way to identify the product. In the first cited passage (Petrovich, col. 12, lines 49-57), Petrovich states checking out at a point of sale check out terminal 56 in which a computerized list is presented and uploaded to terminal 56. In the second cited passage (Petrovich, col. 7, lines 18-27), Petrovich states that a printer can print out a hand copy of the shopping list. Applicants have amended claim 18 to clearly state that the product data are received into the purchasing aid logistics appliance from the merchant computer from a wireless channel which traversing the doorway of the merchant facility. For this reason, Petrovick cannot make obvious Applicants' claim 18.

(4) The Office Action states that Petrovich fails to show the product data to be downloaded from a web site.

On pages 10, 11, and 19, in paragraphs 26, 27, and 52, The Office Action states claims 12 and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Petrovich in view of Treyz as applied to claim 1 above, and further in view of WO 01/20526 (WO '526).

Applicants respectfully point out that WO '526 was published within one year, March 22, 2001, of the filing date of the present application, January 4, 2002. Applicants respectfully reserve the right to file a petition under 37 C.F.R. § 1.131 to swear behind the WO '526 reference.

With respect to dependent claims 12 and 14,

(1) The Office Action states (paragraph 27) that neither Petrovich nor Treyz discloses the first signal to comprise a credit or debit card number and personal identification number.

(2) The Office Action states that WO '526 teaches a method of electronic payment where either credit card or debit card numbers (WO '526, page 16, lines 19-20) and a PIN number ("customer identification number") are transmitted to a merchant computer, that the credit/debit care numbers and PIN number are considered this to be the first signal transmitted, as WO '526 does not discuss any other signal being transmitted to the merchant computer, and that the PIN number unlocks secure memory.

In the cited passage (WO '526, page 16, lines 19-20), WO '526 states that customer identification numbers and credit card information can be stored in the PDA for use during the checkout procedure. The cited passage does not say that the credit/debit card number and/or the customer identification number are transmitted to a merchant computer, as the Office Action states. Further, the example in WO '526 of a customer identification number is not equivalent to a PIN number, but is a frequent shopper number, which is known by the store to identify a customer. A customer would normally not protect secure memory or any personal or financial information with a frequent shopped number because of the public nature of such a number. Still

further, nowhere does WO '526 disclose or suggest that any number is used to unlock secure memory. Thus, WO '526 cannot make obvious Applicants' claims 12 and 14.

On pages 12-13, paragraphs 31-32 and 54 of the Office Action, dependent claims 10 and 17 are rejected under 35 U.S.C. §103(a) as being unpatentable over Petrovich in view of Treyz as applied to independent claim 1, and in further view of Kawan, United States Pat. No. 6,012,049, issued on January 4, 2000 (Kawan).

With respect to dependent claims 10 and 17,

(1) The Office Action states (paragraph 32) that Petrovich discloses smart card reader (Petrovich, col. 7, line 26), and that because the smart card reader in Petrovich functions with Petrovich, it is considered to be integrated with Petrovich.

In the cited passage (Petrovich, col. 7, line 26), Petrovich state that a smart card reader may be used to initiate a self-tendered transaction. Applicants assert that a smart card reader in a kiosk is not Applicants' claimed smart card reader integrated with said purchasing aid logistics appliance because the kiosk of Petrovich is physically separated from the portable terminal of Petrovich. For this reason, Petrovich cannot make obvious Applicants' claim 17.

(2) The Office Action states that neither Petrovich nor Treyz disclose encryption circuitry, and a smart card storing a user personal identification number.

(3) The Office Action states that Kawan teaches a system that interfaces with a smart card with a smart card reader (Kawan, Abstract, col. 5, lines 43-55), that the smart card provides secure account information of a user and includes encryption circuitry (Kawan, col. 5, lines 44-45), that by using a smart card, the user data is secured access to personal information is limited, that a central processor that further includes executable software to compare smart card information and personal identification number to stored data (Kawan, col. 5, lines 48-56) to prevent unauthorized use of the smart card and unauthorized access to a financial account, by

preventing a financial transaction from occurring if the smart card data is not validated (Kawan, col. 5, lines 53-56).

In the first cited passage (Kawan, Abstract), Kawan states a system with a host financial computer system that maintains records of user account information, a terminal for accessing the financial computer system, a means for transmitting and receiving data corresponding to user account information, a smart card interface device, a smart card, and a hierarchy for access of user account information, a means for bypassing levels of the hierarchy.

In the second cited passage, which incorporates the remaining cited passages, (Kawan, col. 5, lines 43-55 (56)), Kawan states that the smart card incorporates digital encryption signatures and encryption algorithms to enable the smart card to be validated from a remote location, that both ends of the communication may each have an encryption key so that data that is sent via the smart card is validated at the host computer, and that the host computer can validate the smart card so that a financial transaction can take place.

In other words, the system of Kawan includes an encrypted smart card that is validated at the host computer. Applicants, on the contrary, claim, in claim 10, secure memory in the purchasing aid logistics appliance that is encrypted. Kawan does not make obvious Applicants' claim 10 because Kawan's smart card is external to a portable device and is not secure memory coupled to a central processor within a portable device as Applicants have claimed. Further, Petrovich, Treyz, and Kawan do not make obvious Applicants' claim 17 because none disclose or suggest Applicants' claimed central processor that is part of the purchasing aid logistics appliance that compares smart card information and user PIN to data stored in the smart card and the central processor. As the Office Action states, neither Petrovich nor Treyz disclose a smart card storing a PIN, and none of the references disclose comparing smart card information and user PIN to data stored in the smart card and on the portable device. For these reasons, neither Petrovich, nor Treyz, nor Kawan, nor their combination makes obvious Applicants' claim 17.

On pages 13-14, paragraphs 33-35 and 55 of the Office Action, independent claim 19 is rejected under 35 U.S.C. §103(a) as being unpatentable over Petrovich in view of WO '526 and Ruppert et al., United States Patent Number 5,424,524, issued June 13, 1995.

With respect to independent claim 19,

(1) The Office Action states that Petrovich discloses a purchasing aid logistics appliance (40) with a secure memory (Petrovich, col. 5, lines 55-61).

In the cited passage (Petrovich, col. 5, lines 55-61), Petrovich states that a personal identification number that can be used instead or as a supplement for added security to guard against theft of terminal 40, that terminal 40 can be used in conjunction with a credit or debit card of the user and can have identical identifying indicia, and that an interface with the magnetic strip reader can be provided for entering credit card information into terminal 40 or directly into host 16. Applicants, on the contrary, claim a purchasing aid logistics appliance that includes secure memory, which Applicants have described in detail previously and have submitted a declaration by a person of ordinary skill in the art, Thomas J. Leso, that substantiates the argument that secure memory is not what is disclosed by Petrovich.

(2) The Office Action states Petrovich discloses means for storing said shopping list and user personal information (Petrovich, 16, 40), that the shopping list and personal information are stored on the portable device, in its memory, that the device requires a PIN number to access the information in memory, that there is a layer of security provided, which qualifies it as "secure memory".

The cited reference numbers refer to the host computer and portable terminal of Petrovich, neither of which are disclosed to have secure memory. Applicants refer to the affidavit presented herein and to Applicants' specification which clearly states that secure memory is not Petrovich's disclosed access control.

(3) The Office Action states that Petrovich discloses means for two-way data and voice communication with the merchant computer (Petrovich, col. 12, lines 9-27).

In the cited passage (Petrovich, col. 12, lines 9-27), Petrovich states that the cradle into which the portable terminal is placed dials up the shopping establishment and that the handset from the cradle can be used to respond to a digitized voice from the host computer when the portable terminal sends shopping list items to the host computer. In other words, the merchant computer of Petrovich communicates with the cradle which provides voice and data communications with the host computer. Petrovich does not, however, disclose Applicants' claimed purchasing aid logistics appliance having a means for two-way data and voice communication with the merchant computer because the two-way communication of Petrovich is between the cradle and the host computer. For this reason, Petrovich does not make obvious Applicants' claim 19.

(4) The Office Action states that Petrovich does not disclose means for electronic payment or means for calculating the total price of the items, as claimed.

(5) The Office Action states that WO '526 teaches a shopping list organizer comprising a portable device (112) that includes means for making an electronic payment (page 16, lines 8-31), that Examiner maintains that there is no step of verification in Applicants' claim 19, that the claim requires only "means for electronic payment", and that "means for electronic payment" is explicitly disclosed by WO '526.

Applicants assert that an additional step in Claim 19 is not necessary since the process of electronic payment is well understood, but the process with respect to a handheld device is not. Applicants respectfully point out that WO '526 purports to include an electronic payment capability, but nowhere enables an electronic payment process with respect to handheld portable devices. Although the process of electronic payment is well understood, the process with respect to a handheld portable device is not obvious. The mere mention of a capability by WO

'526 does not enable that capability. Applicants, on the contrary, fully enable Applicants'

claimed means for electronic payment, and as that capability is well understood, Applicants

assert that no further step is necessary. Applicants further assert that WO '526 cannot make

obvious Applicants' claim 19 because WO '526 does not enable any electronic payment means in

a handheld device.

On pages 14-15, paragraphs 37-39 of the Office Action, independent claims 21 and 28 are

rejected under 35 U.S.C. §103(a) as being unpatentable over Treyz in view of Kawan.

With respect to independent claims 21 and 28,

(1) The Office Action states that Treyz does not explicitly disclose a encrypting memory

coupled to the processor, to safeguard personal and financial information.

(2) The Office Action states that Kawan teaches a system that interfaces with a smart

card (Kawan, Abstract, col. 5, lines 43-55) with a smart card reader, that the smart card provides

secure account information of a user, and includes encryption circuitry (Kawan, col. 5, lines 44-

45), that by using a smart card and encryption circuitry the user's personal and financial

information is safeguarded, that the encryption of Kawan meets the limitation of "modifying

memory coupled to said processor", and that it would have been obvious to modify Treyz as

taught by Kawan such that memory of Treyz is encrypted, thereby safeguarding the user's

persona and financial information.

In the first cited passage (Kawan, Abstract), Kawan states a system with a host financial

computer system that maintains records of user account information, a terminal for accessing the

financial computer system, a means for transmitting and receiving data corresponding to user

account information, a smart card interface device, a smart card, and a hierarchy for access of user

account information, a means for bypassing levels of the hierarchy.

In the second and third cited passages (Kawan, col. 5, lines 43-55), Kawan states that the smart card incorporates digital encryption signatures and encryption algorithms to enable the smart card to be validated from a remote location, that both ends of the communication may each have an encryption key so that data that is sent via the smart card is validated at the host computer, and that the host computer can validate the smart card so that a financial transaction can take place.

In other words, the system of Kawan includes an encrypted smart card that is validated at the host computer. The Office Action suggests that because Kawan teaches encrypting a smart card, it is an obvious matter to encrypt the memory of a purchasing aid logistics appliance. Applicants respectfully disagree. A smart card is a data storage device that is wholly separate from the central processor of a computer that might access it. Encryption of such a device is a matter of modifying the data according to an algorithm. A central processor accesses its coupled memory for its own internal use, including bringing in executable applications from storage to have them ready for fast retrieval when the CPU is ready, and creating temporary data structures for fast processing such as during the execution of sorting algorithms. Encrypted memory coupled to a central processor would pose special problems to the processor, including, but not limited to, distinguishing appropriately between the encrypted part of memory and the unencrypted part so that, for example, application code would not be placed in encrypted memory unless the central processor knew to decrypt it before executing it. An encrypted smart card would simply be decrypted and the data accessed. The continued integrity of operation of the central processor would not be at risk if the smart card data were not decrypted, whereas encrypted memory coupled to a central processor could pose such integrity of operation problems should the central processor not be programmed to understand the location of the encrypted memory. Thus, neither of Treyz nor Kawan provides Applicants' claimed means for encrypting memory coupled to said central processor because neither has disclosed or suggested this concept nor a method by which encrypted memory coupled to a central processor might be

managed. For this reason, neither Treyz nor Kawan, separately or in combination, can make obvious Applicants' claims 21 and 28.

Applicants assert that claims 4-9, 13, 15, 16, and 23-25 are patentable at least because of their dependence upon patentable independent claims 1 and 22.

IX. CONCLUSION

In view of the absence from any cited reference of Applicants' claimed invention as set forth above, Applicants respectfully urge that Petrovich, Treyz, Ruppert, WO '526, Shaw, Kawan, and inherency, separately or in combination, are legally insufficient to render the presently claimed invention anticipated under 35 U.S.C. § 102 and/or obvious under 35 U.S.C. 103.

Independent claims 1, 18, 19, 21, 22, and 28 are believed to be in condition for allowance. All dependent claims depend upon allowable independent claims, and are therefore also believed to be in condition for allowance. Applicant respectfully requests that a timely Notice of Allowance be issued in this case.
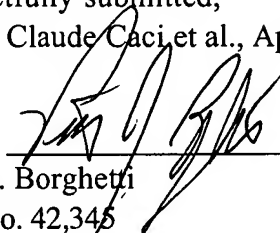
Applicants have added one independent claim and one dependent claim. However, three independent claims have been previously withdrawn from consideration, so no new fees for these new claims should be required. Applicants have requested a one month extension of time, and herein authorize the Commissioner for Patents to charge $120 (large entity fee) and any additional fees or credit overpayment to Deposit Account No. 03-2410, Order No. 12078-129.

The following information is presented in the event that a call may be deemed desirable

by the Examiner: PETER J. BORGHETTI (617) 854-4000.

Respectfully submitted,
Joseph Claude Caci, et al., Applicants

Date: February 6, 2006

By: _____

Peter J. Borghetti
Reg. No. 42,345
Attorney for Applicants

Amendments to the Drawings:

The attached sheet of drawings include changes to FIGs. 1, 3, 8, 9, 10, 11, 11A, and 16. This sheet, which includes FIGs. 1-16, replaces the original sheet including FIGs. 1-16.

In FIG. 1, previously incorrectly-labeled element 30 has been relabeled to element 28.

In FIG. 3, previously duplicate-labeled elements 102, 104, 106, 108, and 112 have been relabeled to 102A, 104A, 106A, 108A, and 112A respectively.

In FIG. 8, previously duplicate-labeled elements 10, 12, 20, and 22 have been relabeled to 10A, 12A, 20A, and 22A respectively.

In FIG. 9, previously duplicate-labeled elements 32, 34, and 36 have been relabeled to 32S, 34A, and 36S respectively.

In FIG. 10, previously duplicate-labeled elements 40, 42, 44, and 46 have been relabeled to 40S, 42A, 44A, and 46A respectively.

In FIG. 11, previously duplicate-labeled elements 50, 52, 54, 56, and 58 have been relabeled to 50A, 52A, 54A, and 56A respectively. Signal 58, referred to in paragraph 52 of Applicants' Specification, has been added to FIG. 11 as reference number 58A because reference number 58 was duplicated in the specification. Decode key 57, which is referred to in paragraph 52 of Applicants' Specification, has been added to FIG. 11.

In FIG. 11A, previously duplicate-labeled elements 41 and 43 have been relabeled to 41e and 43c respectively.

In FIG. 16, previously duplicate-labeled element 320 has been relabeled to 320A.

Attachment: Replacement Sheets

Annotated Sheets Showing Changes

10

System Bus Address and Data 13

Central Processor 11 and System Main Memory 12	Hardware Interface to Swipe Reader 32	Magnetic Stripe Reader 34
Boot Program on EPROM (Memory) 14	Hardware Interface to Smart Card 36	Smart Card Reader 38
Flash Memory and System Software 16	Radio Link Controller 40	Radio Subsystem 42
Encryption Circuitry equipped RAM 18	Barcode or Optical Reader Subsystem 44	Optical Scan Assembly 46
Micro Video Display Controller 20	Touch Screen Interface Controller 48	Touch Screen Device and Electronics 50
Micro Video Display 22	Keyboard, Switch and Indicator Interface 52	Front panel Keys, Switches and Indicators 54
Voice Digital Conversion Input / Output 24	Analog to Digital Converter 56	Weight Measuring Device 58
Voice Analog Circuitry Speaker and Mike 26	Short Range Radio Link to Earpiece 28	Remote Earpiece 30 28

Changed to "28"

FIG. 1

FIG. 3

70

Top of Map   Changed to 10A   Changed to 12A

72   13 RAM input

RAM 10   ←

10A   12 RAM output

                                           12A

72   Video 15   17 circuitry

                    Changed to 20A   Changed to 22A

72   Encrypted RAM 20   ←   22 write circuitry
                    20A   22A

                                           23 read circuitry

72   ROM BIOS 25

FIG. 8

Step 1

Step 3

Smart card
PIN 30

User PIN input
31

Changed to 32S

Verify PIN 3̶2̶
32S

Verify
Bond
Condition
3̶6̶ 36S
Changed
to 36S

Secure data
hash 33

Smart card data
hash 3̶4̶ 34A
(Changed to
34A

Step 2

Verify data hash
35

Step 4

Yes

No

Is the PIN
Valid?

Unlock encrypted
RAM 38

Destroy data in
Encrypted RAM 39

FIG. 9

Generate 2 Independent
Variables 40~~/42~~   *Changed to 40S*
X1 Value and Y1 Value

X1 Variable
41

Generate Encrypted RAM
Key
43

Y1 Variable
~~42~~   *Changed to*
42A   *42A*

Changed to 46A

Encrypted RAM ~~46~~ *46A*

RAM
45

Special Address Decoder
~~44~~ *44A*
Changed to 44A

FIG. 10

FIG. 11

Radio
Subsystem 42

Signal Absorbing
Material
41b

41a

Reflecting Cone
Shaped Director
41c

Antenna
Controller
Forward
Directional 41

41e

Changed
to 41e

Directional
Element
41d

Radio
Link
Controller
40

Antenna
Controller
Omni
Directional 43

43c

Changed to
43c

Dual Back-to-Back
Hemispherical
Coverage
Antennas
43b

43a

FIG. 11a

58

Pulley 318

315A

Shaft 314

315B

Line Release 322

Strain Gauge
312

Spring 320

TO CIRCUITRY 58
(FIG. 1)

Braided Line 316

Line End 321

Spring Loaded Slip Knot
Device 320

320A

Changed to '320A

FIG. 16